

given up on a learning experience altogether rather than face the frustration of running an unequal race with a brother or sister who "always does well in math" or "has such a gift for the piano."

On receiving this advice, many parents respond, "But what about the *real* world out there? Isn't it competitive? Indeed it is, but among the first requirements for anyone who would *compete* and *succeed* are a degree of self-confidence and a belief in oneself. Only after the child's feelings of self-worth—both within the family and in the school learning situation—are established should he or she be encouraged to develop the ability to appraise his or her own talents in relation to the achievements of others.

Intelligence Tests

Many parents worry unduly about the results of intelligence tests. These tests are imperfect attempts to determine how a child is functioning intellectually *at the moment in time the test is given*. Many factors, including the environment in which the child is placed, the experiences he has had, and the education he has received may affect the outcome. Surprisingly, even such a trivial item as what the child ate for breakfast could influence the test results.

Motivation

Motivation is a key element in learning, but parents and teachers must realize that what may prove strong motivation for one student may lack appeal for another. Some students work hard for the sheer pleasure of learning. Others respond more readily to good marks, tangible rewards, or even punishment. Unless a learner is properly motivated, learning will not take place. A large part of being a good teacher lies in the skill with which the teacher can stimulate a student into activity that is meaningful, and, at the same time, achieves the school's goals.

While most people will agree that inner motivation—such as curiosity or self-satisfaction—is preferable to rewards or punishment, there are occasions when a reward enables a child to finish a task and thereby experience for the first time the joy of accomplishment. On the other hand, excess strain—such as pain, fear, or anxiety—may inhibit or prevent learning entirely. This is why it is so important for parents to show that they *care* about their child's learning without appearing anxious at the same time.

Challenge is a necessary motivation for learning, but if the challenge is so great that the child sees the goal as unattainable, he will become frustrated and give up. The best challenges for learning are those that the child sees as being within his grasp if he tries.

Using the Senses

All the senses—smell, touch, taste, hearing, and vision—can be used in the learning process. Too often, parents and teachers rely solely on the last two in attempting to help the learner. A young child loves to move and touch. Later, children like to listen. In adolescence, students may prefer a visual presentation. Regardless of their age, however, children may have a *preferred* way of learning. Although you should allow your children to use their preferred method for learning, you should also play "sensory games" with them to increase their sensitivity in areas of weakness. For example, feeling objects hidden in a cloth bag and guessing what they are may be helpful for children who don't use touch in their learning. Listening and smelling games (blindfolded) may help those who rely too heavily on vision. Children should be encouraged to use *all* their senses.

Adult Definitions of Learning

How you define learning will, to a great extent, reflect your philosophy and attitudes toward life and people. This in turn will affect your expectations of the school, your opinions as to what should be taught, and the methods to be used. For example, if you see man as a machine producing goods, you will want a structured curriculum with all the learning tasks laid out on a conveyor belt. If you see man as a bank in which deposits of knowledge are to be made, you will want teachers to concentrate on facts. If you see man as an animal that needs training, you will want the teacher—like the lion-tamer—to "train" your child to be subservient to authority. If, however, you see man as a thinking being, you will want the school to encourage your children in independent thinking, to use problem-solving methods, and to regard errors as necessary trials.

If you have any questions or concerns about your children's progress or their school's approach to learning, we suggest you talk with their teachers or principal. Your interest and involvement *can* make a difference.



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How Your Child Learns



Learning begins at the moment of birth. As an infant, your child soon discovers that crying brings comforting arms and food; that saying "da-da" brings parental murmurs of delight; that touching a stove may result in a slap. The rate at which most children learn is remarkable. A one-year-old's vocabulary may consist of only three words; by the time the child is six, it will probably have grown to *three thousand* words.

- But how does learning actually occur? How is it related to intelligence?
- Why do some children appear to learn more easily or quickly than others?
- What kinds of learning experiences should the home and school provide?

Educators and psychologists have grappled with these questions for years, but most of them now agree that intellectual development takes place in a more or less predictable sequence.

Infancy

During the first two years of their lives, children react *physically* to their surroundings. At first, moving objects are followed by the eyes; later, attempts are made to grasp them. Between four and eight months, a sense of *personal purpose* becomes apparent. Infants begin to repeat actions that they find enjoyable, such as purposely dropping objects on the floor and watching adults pick them up. By twelve months, their increasing *curiosity* and mobility combine to make mother's life difficult. By eighteen months, *invention* appears: children may use a spoon as a tool to push a cup off a table, although they may never have seen it used that way before.

The Pre-School Years

Between the ages of two and seven, children's language becomes more complex and new thinking processes and intellectual skills appear. Children begin using symbols—pictures, objects, words, and sounds—to represent objects that are known to them from previous experience. A long piece of wood, for example, might represent the CN tower; a small box might be granny's house. Boys, in particular, make engine sounds as they pretend to be cars.

At this stage in their development, children are egocentric. They tend to play *alongside* other children rather than *with* them. The only rules of a game are *their* rules. They see things the way *they* wish to see them. *Their* perception of a situation is the only one they will accept.

The only way in which children of this age are able to differentiate between right and wrong, good or bad, is according to the kinds of rewards or punishments they receive from their parents. For example, if a child is reprimanded more for saying that she saw a dog as

big as an *elephant* than she is for saying that she saw a dog as big as a *pony*, she will naturally come to believe that the larger exaggeration is a far worse *offense*. Having reached this conclusion, she would also believe that knocking *three* of mother's plates from the table would be far worse than breaking *one*. At this stage of intellectual development, the child would not be considering other factors such as intent.

The Elementary School Years

Between the ages of seven and thirteen, children become capable of applying logical solutions to problems that involve things they can see, touch, or experience, but they still find it difficult to deal with abstractions. For example, an eight- or nine-year-old who can easily sort ten sticks according to length may find it difficult to cope with the question, "If John is taller than Robert and John is shorter than Tom, who is the tallest?"

The Ministry of Education's curriculum guideline for teachers of children in the Primary and Junior grades states that "the experiences of these early years mould the child's attitudes to learning and provide the basic skills and impetus for continuing progress."

Most parents agree that it is important for children to develop a lifelong love of learning, but some worry about the apparent slowness of some of the modern methods that place greater emphasis on developing enjoyment of learning. Even among educators, the relative merits of *discovery learning* and *reception learning* (the rote learning of what is *potentially* useful) continue to be debated.

There's little doubt that children of this age show a natural propensity for rote learning. They love rhymes, rhythms, and jingles; their street or schoolyard games, and activities such as skipping, are usually accompanied by memorized, ritualistic chants. On the other hand, although children can and do learn much through rote learning inside the classroom, research shows that transfer of learning—the use of the learning in a new situation—is superior when children become familiar with the principles involved.

Also, in many areas of learning, *practice*, is an important dimension. Some children need the security gained from repeated experiences. Children in the *latter stages* of this period begin to enjoy the power of their own thinking. They love to observe, to examine critically, and to tease parents with riddles and jokes. Their view of the world is still simplistic, however. This is reflected in the "cops and robbers" games they play. In their world, there are only "good guys" and "bad guys", and the bad must be punished. Justice, for children of this age, is simple and ruthless.

Adolescence

The final stage of intellectual development begins in early adolescence, around twelve to fourteen, when children begin to reason, to use logic, and to follow the *form* of an argument. Children of this age progress from thinking of law in simple terms to considering the wider questions of justice—the social, moral, and legal aspects of man's attempts to create and maintain order. This is also the period when words are released from the concrete and begin to "take wing". It is important that children of this age be exposed to situations and conversations that will extend their vocabulary and help them to think abstractly.

Factors Affecting Learning

At *all* stages, the rate at which intellectual growth takes place is determined by at least four factors:

- the rate at which children mature biologically
- the information they receive through language or instruction
- the experiences to which they are exposed
- the balance they are able to achieve between new information and previous conceptions

When children receive new information, their minds are thrown into a temporary state of uncertainty. They need to reconcile this new information with what they already know and understand.

Children will often attempt to keep their ideas intact and fit new perceptions into familiar ones even if they have to distort the new perceptions to do so. Consider, for example, the young child who has encountered only *friendly dogs*, and is suddenly confronted with one that barks and bites. He might easily convince himself that *this* animal is not a dog at all, but a wolf—a dog-like animal that he *knows* to be vicious. If he *continues* to meet dogs that bark or attempt to bite, however, he will gradually reorder his understanding to fit the new perception and decide that there are two kinds of dogs in the world—friendly dogs and dogs that bite. Stimulating this process of interpretation and change is the task of a good teacher. Experiences that are presented to children must bear some relationship to what they already know, but must also include some novel quality or element that impels children to think and search for balance.

Competition

Because biological factors affect intellectual growth, it follows that individual children—even in the same family—will differ in their capacity to learn just as they differ physically or in terms of personality.

As a parent, you should encourage your children to compete with themselves, rather than with brothers and sisters. Don't make comparisons; look for the individual strengths of each child. Many a child has